



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/674,119

09/26/2003

Thomas Ferianz

1406/169

2564

25297

7590

02/04/2005

JENKINS & WILSON, PA
3100 TOWER BLVD
SUITE 1400
DURHAM, NC 27707

EXAMINER

TON, MY TRANG

ART UNIT

PAPER NUMBER

2816

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,119

Applicant(s)

FERIANZ, THOMAS

Examiner

My-Trang N. Ton

Art Unit

2816

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


MY-TRANG NUTON
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

In response to Applicant's amendment filed on 11/22/04, the rejection made in the last office action on the Burns et al and Mizutani et al references are withdrawn. A new Office action has been made as follows:

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Claims 1 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the frequency-dependent signal feedback" in lines 7-8, "the signal output" in line 11, and "the signal line connection" in line 13. There are insufficient antecedent basis for these limitations in the claim.

In claim 3, it is unclear as to whether "a signal line connection" recited in last line is additional limitation "the signal line connection" as previously cited in claim 1. Moreover, in last line, the limitation "for the connection of a signal line" appears to be redundant recited with "a signal line connection".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Tietze (Ref. No. ISBN 3-540-64192-0) cited in PTOL 1449.

Tietze discloses in Fig. 5.46b a circuit including:

at least one amplifier circuit (U2) with low output impedance for the signal amplification of the useful signal;

a protection impedance (Riso and CL) respectively connected downstream of the amplifier circuit (U2) and serving to protect the amplifier circuit (U2);

wherein

provision is respectively made of a feedback circuit (feedback from output of U2 to input of U2, Rn, Ck) for a frequency dependent signal feedback of the useful signal amplified by the amplifier circuit (U2); wherein

the signal feedback circuit (feedback from output of U2 to input of U2, Rn, Ck) respectively has a capacitor (Ck), which is connected between a signal output of the operational amplifier (U2) and a signal input of the operational amplifier (U2), and a resistor (RN), which is connected between a signal line connection (signal line connected from Riso to RN) and the signal input of the operational amplifier (U2) as recited in claim 1.

The amplifier circuit (U2) is an operational amplifier having an inverting signal input, a noninverting signal input and a signal output as recited in claim 2.

The protection impedance (Riso and CL) is connected between the signal output of the operational amplifier (U2) and the signal line connection for the connection of a signal line (the signal line connected from Riso to RN) as recited in claim 3.

Regarding claim 4, the limitation "the signal line is a telephone line for connecting a telephone to the driver circuit" is seen to define intended use. The circuit of Tietze is capable of using for connecting a telephone line as recited. **In re Tuominen, 213 USPQ 89 (CCPA 1982) & In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974)**

As to all the remaining performance recitations in claims 7-8, these are deemed to be inherent, since the claimed structure is fully anticipated by Tietze. **195 USPQ 430 In re Best.**

Regarding claim 9, the limitation "the second frequency range is a voice signal band for the transmission of a telephone voice signal" is seen to define intended use. The circuit of Tietze is capable of using voice signal band for the transmission of a telephone voice signal as recited. **In re Tuominen, 213 USPQ 89 (CCPA 1982) & In re Pearson, 494 F.2d 1399, 181 USPQ 641 (CCPA 1974)**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Tietze as applied to claim 1 above, and further in view of the prior art depicted by Applicant's Fig. 1 (or fig. 3).

As stated above, every element of the claimed invention recited in above claims can be seen in the circuit of Tietze. However, this reference does not specifically show

the "driver circuit is of differential construction ... and two symmetrically constructed feedback circuits" as recited in claim 5.

The prior art, Fig. 1 (or Fig. 3) teaches the well-known driver circuit has two symmetrically constructed amplifier circuits, two symmetrical protection impedance and two symmetrically constructed feedback circuits.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ the circuit in Fig. 5.46b of Tietze as one symmetrically constructed for the driver circuit in the prior art, Fig. 1 (or Fig. 3) since this involves nothing more than showing the plurality of the driver circuit.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tietze.

As stated above, every element of the claimed invention recited in above claims can be seen in the circuit of Tietze. However, this reference does not specifically show "the second limiting frequency of the second frequency range is about 4KHz" as recited in claim 10.

Although Tietze does not expressly state the frequency range is about 4KHz, this difference is not of patentable merit because it is notoriously well known in the art that different values for frequency range can be selected in order to produce correspondingly different output values.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the frequency rang is about in realizing the circuit of the Tietze reference for the purpose of producing different output values when different values of the frequency is selected.

Art Unit: 2816

Any inquiry concerning this communication or earlier communications from the examiner should be directed to My-Trang N. Ton whose telephone number is 571-272-1754. The examiner can normally be reached on 7:00 a.m - 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



My-Trang N. Ton
Primary Examiner
Art Unit 2816

February 3, 2005